

OBSERVATIONS ON *CRYPTURGUS ALEUTACEUS* SCHWARTZ
(COLEOPTERA: SCOLYTIDAE), AN ASSOCIATE OF THE
SOUTHERN PINE BEETLE¹

M.W. MacGown² and T.E. Nebeker²

ABSTRACT: *Crypturgus aleutaceus* Schwartz is recorded as an associate of the southern pine beetle in Mississippi for the first time. SEM photographs are presented to distinguish this minute bark beetle taxonomically and to point out some unusual features of the antennal morphology.

Crypturgus aleutaceus Schwartz (Figs. 1-4) was reared in the fall of 1975 from the bark of shortleaf pine (*Pinus echinata* Mill.) collected at the Homochitto National Forest in southern Mississippi. Craighead (1950) suggested that the beetles utilized burrows and ventilation holes of other, larger species, i.e., *Dendroctonus*, *Ips*, *Polygraphus* and *Monochamus* to gain entry to the tree; the specimens discussed herein could only have been associated with *Dendroctonus frontalis* Zimm. Occasionally up to 40 specimens of the species in addition to the southern pine beetle and other associates were reared from 66 cm² of bark.

The range of the species was previously known to extend from New Jersey to Florida. Blatchley and Leng (1916) recorded the species from *Pinus palustris* Mill. in Florida and from *P. virginiana* Mill. in Washington, D.C. This report and that of Stein (1975) extend this west to Texas. Blackman (1922) did not previously list this species in his summary of the bark beetles of Mississippi, and it was absent from his comprehensive bark beetle collection at Mississippi State University.

Payne et al. (1973) presented SEM photographs of the antennae of several species of *Dendroctonus*, *Ips*, *Pseudohylesinus*, *Scolytus* and *Trypodendron* (Coleoptera: Scolytidae), all of which differ considerably from the antennae *C. aleutaceus* (Figs. 3 and 4).

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² Graduate Research Assistant and Assistant Professor, respectively, Department of Entomology, Mississippi Agricultural and Forestry Experiment Station, Mississippi State University, Mississippi State, Mississippi 39762. Scientific Contribution no. 3376.

While the keys of Blatchley and Leng (1916), and others call for a two-segmented funicle, only one segment is present according to our observations (Fig. 2, arrow; Fig. 3, fu). The club is relatively large, quadrangular, without sutures, but with a lateral and apical recessed area which contains numerous sensory organs. Sensilla chaetica are sparsely scattered over the surface of the club. Both short and long basiconica are present in the recessed area (Fig. 4, b₁, b₂). Along with these are found several large, lobe like organs, apparently sensilla basiconica (Fig. 4, b₃) which were not described in Payne et al. (1973).

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Figs. 1-4. Crypturgus aleutaceus Schwarz.

Fig. 1. Whole mount, X170.



Fig. 2. Head, Thorax in side view, X440 (arrow indicates funicle, the diagnostic character).

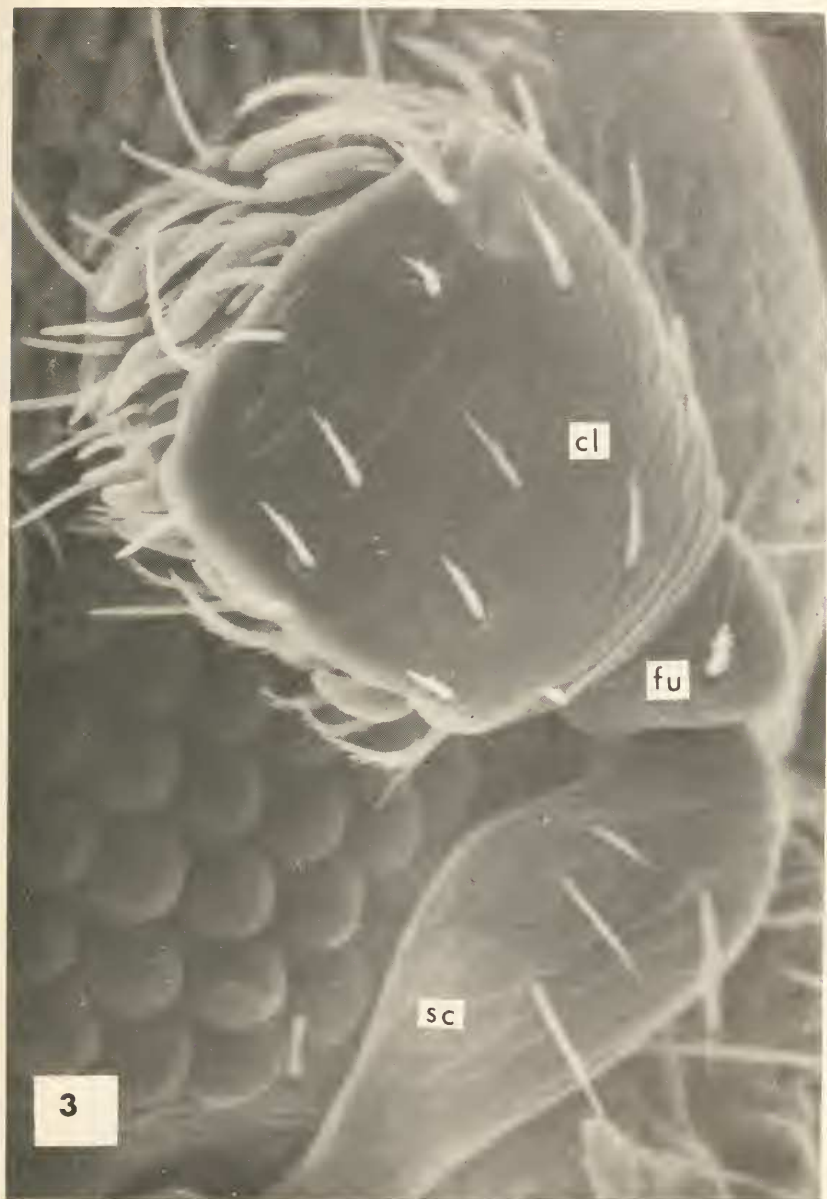


Fig. 3. Antenna, X1400 (sc = scape, fu = funicle, cl = club).



Fig. 4. Apex of antennal club, X7000 (b_1 = short basiconica, b_2 = long basiconica, b_3 = large, lobe-like basiconica).